Work Order ID 58458

May 7, 2010 10:10:15 AM

Required Date: 14/05/2010



Page 1

Item ID:

D412-702-321

Accept



Setup Start

Stop



Revision ID: Item Name:

Harness Assembly

Start Date:

07/05/2010

Start Oty: 2.00

Req'd Qty: 2.00



Cust Item ID: **Customer:**

Reference:

Approvals:

Process Plan:

Α

Date: 16-5-07 Tooling: Date:

SPC (Y/N):

Date:

Date:

Run

Start Stop

Sequence ID/ Work Center ID

Operation Description

Revision Nbr

Set Up/ **Run Hours**

Draw Number

Draw Plan Rev. Code

Reject Accept Qty Qty

Reject Number

Insp. Stamp

Draw Nbr

DSI 9511

100

Small Fab

Memo

0.00

0.00

Small Fab

Assemble as per dwg ICA D412-702 p.49

110

QC

Memo

0.00

2 volostiz

Quality Control



Packaging

Memo

0.00

0.00

Identify with P/N & CHG# and pack for shipping as per PPP D412-702-321

CHG001 Location: PPP Rev:

QC5- Inspect part completeness to step on W/O



Work Order ID 58458

May 7, 2010 10:10:15 AM

Required Date: 14/05/2010



Page 2

Item ID:

D412-702-321

Accept



Setup Start

Stop



Revision ID:

Harness Assembly Item Name:

Start Date:

07/05/2010

Start Qty: 2.00 Req'd Qty: 2.00

Operation

Description

Cust Item ID: Customer:

Reference:

				۱	
A	pp	ro	va	IS:	

Process Plan:

Date:

Tooling:

Date:

Start

Run



QC:

Date: _____

SPC (Y/N):

Set Up/

Run Hours

Date:

Stop



Sequence ID/ Work Center ID

130

Memo

QC21- Final Inspection - Work Order Release

0.00

0.00

Draw Number

Draw Plan Rev. Code Accept Qty

Reject Qty

Reject Number Stamp

Insp.

Quality Control

Picklist Print

May 7, 2010 10:10:19 AM

Work Order ID: 58458

D412-702-321

Parent Item Name: Harness Assembly

Parent Item:



Start Date: 07/05/2010

Required Date: 14/05/2010

Page 1

Comments: I	PP Rev:A new issu	ue DD 10.04.30	verified	l:EC				8	Start Qty: 2.00		Required Qty: 2.	00
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
D3570-3		Manufactured	No				Each	15.0000	1		. /	
Bracket						B	52885	2		Bi	0/05/17	۷
1				Location		Loc (<u>Oty</u>	Loc Code				
				ST245A			15		_			
D4088-043		Manufactural	No		52885		15		_		,	
		Manufactured	No				Each	0.0000] 	01	1 -/	
						\mathcal{R}	5823	3	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1510	105/17	
MS24694-S50		Purchased	No			ممة	Each	106.0000		/- /		
							2401.	100.0000		1/	1-1-	
Screw										J>11	105/17	
				Location		Loc (<u>Oty</u>	Loc Code		•		
				ST289			106					
AN960JD10L		.			113538		106		~-	8	/	
1881911 /81/91 ove 1844 8444 8844 8444 8444		Purchased	No				Each	4,299.000		01	//	
	181 JIBN 8811871 81 1861									10/	05/17	
, ashor				Location		Loc C) ts:	Loc Code				
•				ST348			299	Luc Code				
					110985		299			8		
/IS21042L3 18814811 11818 118 11811 11811 88111 81111 11	112 () 1 22 (()) (22)	Purchased	No				Each	1,673.000			, /	
					•						105/17	
lut .									7	7-10	103/1	
				<u>Location</u>		Loc C		Loc Code		/		
i				ST300	112527	1	673					
					113537 113644		20 653		_	~		
ı					114523		000			U		

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WORK ORDER
NO 5 155

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3
REF TCCA STC SH04-7
REF FAA STC SR01997NY
REF EASA STC EASA.I.M.R.S.00710

This service instruction adds several kits equipped with improved inertia reels:

The Dart **D412-702-341** 13-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for all 13 passenger seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the **D412-702-041B** kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-343** 5-Man Forward Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5 forward facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-043B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-345** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 aft facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-045B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-347** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 side facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-047B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-349** 1-Man Shoulder Harness Kit provides a 3-point harness with an inertia reel and joined lap and shoulder belts for the center forward facing seating position in the aircraft cabin. The kit also contains hardpoints for securing the harness. The harness for this kit meets the requirements of TSO-C114 and replaces the existing lap belts. This kit should be installed similar to the **D412-702-049B** kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-351** 1-man 3-point shoulder harness kits are available for the outboard seats of the 5-man forward facing bench in Bell 205/212/214/412 model aircraft. The kit can be installed LH or RH. These kits should be installed similar to the D412-702-051B/-052B kits, as detailed in Table 1 of this service instruction.

The Dart **D214-702-337** 5-Man Aft Facing Shoulder Hamess Kit provides 3-point harnesses with inertial reels and joined lap and shoulder belts for the 5-man aft facing seat installed in the Bell 214B/B1 model aircraft. This kit should be installed similar to the D214-702-037B kit, as detailed in Table 1 of this service instruction.

The Dart **D205-702-353** 4-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder harnesses for the 4-man aft facing seat installed in the UH-1 model aircraft. This kit should be installed similar to the D205-702-053B kit, as detailed in Table 1 of this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY:
D. SHEPHERD (DE # 02)

Α	NEW IS	SSUE		CP	10.03.18	
REV.			DESCRIPTION	BY	DATE	
DESIGN		q	DART AEROSPA	/CE	LTD	
DRAWN		9?	HAWKESBURY, ONTARIO			
CHECK	ΞD		DRAWING NO.		REV. A	
MFG. AF	PR.	N/A	DSI 9511	S	HEET 1 OF 6	
APPRO	/ED	140,	TITLE		SCALE	
DE APPI	R.	4	NEW SHOULDER HARNESS	KITS	NTS	
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INSTALLATION

The Dart D412-702-3XX kits should be installed similar to the kits in Installation Instructions IIN-D412-702 Rev. E or Dart Service Instruction (DSI) listed below:

TABLE 1

Part Number	Description	Install similar to:
D412-702-341	Shoulder Harness Kit	D412-702-041B (IIN-D412-702, DSI 9408)
D412-702-343	Shoulder Harness Kit	D412-702-043B (IIN-D412-702, DSI 9453 [214], DSI 9408)
D412-702-345	Shoulder Harness Kit	D412-702-045B (IIN-D412-702, DSI 9469)
D412-702-347	Shoulder Harness Kit	D412-702-047B (IIN-D412-702, DSI 9408)
D412-702-349	Shoulder Harness Kit	D412-702-049B (IIN-D412-702, DSI 9408)
D412-702-351	Shoulder Harness Kit	D412-702-051B (LH) (DSI 9397, DSI 9408) D412-702-052B (RH) (DSI 9397, DSI 9408)
D214-702-337	Shoulder Harness Kit	D214-702-037B (DSI 9454)
D205-702-353	Shoulder Harness Kit	D205-702-053B (DSI 9460)
D412-702-301 D412-702-303	Harness Assembly Harness Assembly	D412-702-101B (IIN-D412-702) D412-702-103B (IIN-D412-702)
D412-702-305	Harness Assembly	D412-702-105B (IIN-D412-702)
D412-702-307	Harness Assembly	D412-702-107B (IIN-D412-702)
D412-702-309	Harness Assembly	D412-702-109B (IIN-D412-702)
D412-702-311	Harness Assembly	D412-702-111B (IIN-D412-702)
D412-702-313	Harness Assembly	D412-702-113B (IIN-D412-702)
D412-702-315	Harness Assembly	D412-702-115B (IIN-D412-702)
D412-702-317	Harness Assembly	D412-702-117B (IIN-D412-702)
D412-702-319	Harness Assembly	D412-702-119B (DSI 9454)
D412-702-321	Harness Assembly	D412-702-121B (DSI 9454, DSI 9469)
D412-702-323	Harness Assembly	D412-702-123B (DSI 9454, DSI 9469)

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: APPROVED

DESIGN	P	DART AEROSPACE	LTD	
DRAWN	93	HAWKESBURY, ONTARIO, CANA		
CHECKED	4	DRAWING NO.	REV. A	
MFG. APPR.	N/A	DSI 9511 s	SHEET 2 OF 6	
APPROVED	10	TITLE .	SCALE	
DE APPR.	#	NEW SHOULDER HARNESS KITS	NTS	
DATE 10.0	3.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS SPRIATE AND COMPRIGENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR ODES ON COMMUNICATED TO ANY OTHER PRESSON WITHOUT		

TABLE 2

2.1/2	58458
WIO	5042

X					-351		<u> </u>
						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
	X					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
		х				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
			X			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
				х		D412-702-349	Dart 1-Man 3-Point Forward Shoulder Harness Kit
					X	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
1	1		1	1		D412-702-059	GROMMET KIT
9	5		4	1	1	D3761-1-041	HOOK AND LOOP STRIP (DSI 9408)
2	1		1			D412-702-301	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-7	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
2	1		1			D412-702-303	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-8	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
1	1			1		D412-702-305	HARNESS ASSEMBLY (NEW)
1*	1*			1*		D3573-1	ADAPTER (NEW)
1*	1*			1*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S273	SCREW
4*	4*	··· · · · · · · · · · · · · · · · · ·	i	4*		AN960JD10LL	WASHER
4*	4*			4*		MS21042L3	NUT
1	1				1	D412-702-307	HARNESS ASSEMBLY (NEW)
1*	1*				1*	D3573-3	ADAPTER
1*	1*				1*	D4088-041	SHOULDER HARNESS (NEW)
4*	4*				4*	MS24693S272	SCREW
4*	4*				4*	AN960JD10LL	WASHER
4*	4*				4*	M\$21042L3	NUT
	1						HADNEGO ACOEMELY (MEM)
1 1*	1*					D412-702-309	HARNESS ASSEMBLY (NEW) ADAPTER
1*	1*	 +				D3573-3 D4088-041	SHOULDER HARNESS (NEW)
4*	4*					MS24693S272	SCREW
4*	4*					AN960JD10LL	WASHER
4*	4*					MS21042L3	NUT

* denotes that part is included in assembly above

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: D. SHEPH#RD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

continued next page...

DESIGN	P	DART AEROSPACE	LTD			
DRAWN	9?	HAWKESBURY, ONTARIO, CANADA				
CHECKED	B	DRAWING NO.	REV. A			
MFG. APPR.	N/A	DSI 9511 s	HEET 3 OF 6			
APPROVED	140,	TITLE	SCALE			
DE APPR.	#	NEW SHOULDER HARNESS KITS	NTS			
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QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
1		1				D412-702-311	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-1	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				M\$24694\$50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-313	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-2	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1			1			D412-702-315	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
1			1			D412-702-317	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*		-	4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
H						WIGZ 1042LG	1401
1		1				D412-702-321	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-3	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1	+			D412-702-323	HARNESS ASSEMBLY (NEW)
1*		1*	- 1			D3570-4	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*		i		AN960JD10L	WASHER
4*		4*				MS21042L3	NUT

* denotes that part is included in assembly above

continued next page...

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BRANCH
DAO # 01-0-01

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D. SHEPHERD (DE # 02)

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DRAWN	97	HAWKESBURY, ONTARIO, CANADA				
CHECKED	_8	DRAWING NO.	REV. A			
MFG. APPR.	N/A	DSI 9511	SHEET 4 OF 6			
APPROVED	10	TITLE	SCALE			
DE APPR.	#	NEW SHOULDER HARNESS KIT	S NTS			
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... continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
2	2					D3542-1	BRACKET
7	3		4	1		D3571-1	GUIDE
2	2					D3571-3	GUIDE
2		2				D3572-041	GUIDE ASSEMBLY
12	6		6	2		D3578-041	DOUBLER
2	2					D3610-041	BRACKET
2	2					D3618-1	CAP
4	4					AN4-10A	BOLT
2		2				AN4-16A	BOLT
4		4				AN4-25A	BOLT
4		4				AN4-27A	BOLT (DSI 9469)
2	2					AN4-44A	BOLT
2	2					MS24693S274	SCREW
3	3			1		MS24694S56	SCREW
10	2		8			MS24694S58	SCREW
1	1			1		MS24694S60	SCREW
26	6	20				AN960JD416	WASHER
4	4					AN960JD416L	WASHER
12	6	6				MS21042L4	NUT
24	12		12	4		CR3212-4-4	RIVET

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AIRCRAFT CERTIFICATION BRANCH DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

DATE: ____ CERT. NO.: __ ISSUE NO.: __ 10.03.22 SH04-7

DESIGN	q)	DART AEROSPACE LTI)				
DRAWN	97	HAWKESBURY, ONTARIO, CANADA					
CHECKED	4	DRAWING NO.	REV. A				
MFG. APPR.	N/A	DSI 9511 SHEE	T 5 OF 6				
APPROVED	140	TITLE	SCALE				
DE APPR.	-##	NEW SHOULDER HARNESS KITS	NTS				
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TABLE 3

W10 58458

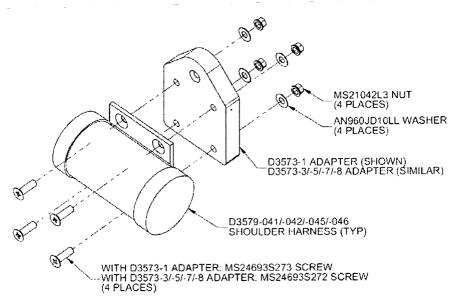
QTY -337	QTY -353	Part Number	Description
х		D214-702-337 Dart 5-Man 3 Point Aft Facing Shoulder Harness Kit, for 214 Aircraft	
	х	D205-702-353	Dart 4-Man 3 Point Aft Facing Shoulder Harness Kit, for UH-1 Aircraft
1	2	D412-702-311	HARNESS ASSEMBLY (NEW) -> SEE TABLE 2
1	2	D412-702-313	HARNESS ASSEMBLY (NEW) -> SEE TABLE 2
1		D412-702-321	HARNESS ASSEMBLY (NEW) -> SEE TABLE 2
1		D412-702-323	HARNESS ASSEMBLY (NEW) -> SEE TABLE 2
1		D412-702-319	HARNESS ASSEMBLY (NEW)
1*		D3925-041	BRACKET
1*		D4088-043	SHOULDER HARNESS ASSEMBLY (NEW)
4*		MS24694S50	BOLT
4*		AN960JD10L	WASHER
4*		MS21042L3	NUT
	1	D3572-043	GUIDE ASSY
	1	D3572-044	GUIDE ASSY
1		D3920-041	SEATBELT GUIDE ASSEMBLY
2		D3920-5	SEATBELT GUIDE
1	6	AN4-16A	BOLT
1		AN4-21A	BOLT
7		AN4-25A	BOLT
18	12	AN960JD416	WASHER
9	6	MS21042L4	NUT

* denotes that part is included in assembly above

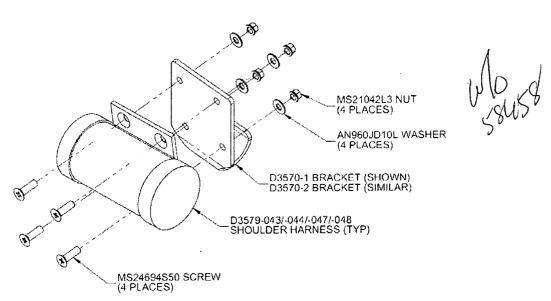
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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

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DRAWN 97		HAWKESBURY, ONTARIO, C	CANADA	
CHECKED	4	DRAWING NO.	REV. A	
MFG. APPR.	N/A	DSI 9511	SHEET 6 OF 6	
APPROVED	149	TITLE	SCALE	
DE APPR.	-#	NEW SHOULDER HARNESS KI	TS NTS	
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<u>DETAIL 'K' D412-702-101A/-103A/-105A/-107A/-109A/-115A/-117A AND</u> <u>D412-702-101B/-103B/-105B/-107B/-109B/-115B/-117B HARNESS ASSEMBLIES</u> (BELTS, K6.2 CLIP AND D3569-1/-2/-3 DECAL NOT SHOWN)



<u>DETAIL 'L' D412-702-111A/-111B/-113A/-113B HARNESS ASSEMBLIES</u> (BELTS AND D3569-1/-2/-3 DECALS NOT SHOWN)

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